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Sequence Listing could not be accepted due to errors.

See attached Validation Report.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: [year=2009; month=8; day=7; hr=8; min=1; sec=42; ms=458;]

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Reviewer Comments:

<210> 15

<211> 3933

<212> DNA

<213> Pseudomonas sp. HJ-2 (phb locus)

<400> 15

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60

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120

tggtaatgg gtactgcgag caatgcggca cgtatacgctc tggtcaccgg tggtatggc
180

ggtatcggtta cggcgatcag ccagcgctg catcggtatg gtttcaccgt ggtggtggc
240

tgtaatccct actccagccg caaggcttcc tggattgccca cgcaactcga ggccggctt
300

cacttccact gcatcgactg cgacatcacc gactggata gcacccgcca ggccttcgac
360

atggtgtcactg agactgtcg cccgatcgat gtattggta acaatgccgg catcacccgc
420

gacggcactt tccgcaagat gtccccggaa aactggaagg cggtgatcga taccaatctc
480

accggcctgt tcaacacaac caagcaggc atcgagggca tgctggccaa gggctgggga
540

cgcgtcatca acatctcctc aatcaatggc cagcgaggcc agttcgggca gaccaactac
600

tccgcggnca aggctggcat tcatggcttc agcatggcct tggcccgca ggtgagtggc
660

aaggcggtga ccgtcaatac ggttccctt ggctacatca agaccgacat gaccgcggcg
720

attcgcccg acatcctcga agacatgatt actggcattc ccgtggcccg tctcgccag
780

cccgaggaga tcgcctcgat cgtggcctgg ctggcctcg atcagtctgc ctatgccacc
840

ggcgccgact tctcggtgaa tggcgccatg aacatgcagt gatgcgccat tcgcgccctc
900

gctcagccat gacatgaggt gttccagatg atcgaagtgc ttatcgctgc cgccactcg
960

accgccccatcg gcgctttcca ggggagcctg gccggcactc ccgcgcgttga actggcgcc
1020

acggtgatcc gccgcctgct cgaacagacc gctctggata gcagtcaggt ggtatgaagt
1080

atactcgcc acgtactcac cgccggtgct ggcagaatac cgctcgccag gcancnggtc
1140

Regarding the above <213> response; per 1.823 of the Sequence Rules, the only valid responses are the Genus species of the organism, "Artificial Sequence", or "Unknown". "Artificial Sequence" and "Unknown" require explanation in the <220>-<223> section; please give the source of the genetic material. Please just list the Genus species as the <213> response; put explanatory matter in the <220>-<223> section; please correct all similar sequences.

The n's at locations 608, 1134, and 1136 are not explained above.

<210> 16

<211> 251

<212> PRT

<213> Pseudomonas sp. HJ-2 (NADPH-dependent acetoacetyl-CoA reductase (phbB))

<400> 16

Met Gly Thr Ala Ser Asn Ala Ala Arg Ile Ala Leu Val Thr Gly Gly
1 5 10 15

Met Gly Gly Ile Gly Thr Ala Ile Ser Gln Arg Leu His Arg Asp Gly
20 25 30

Phe Thr Val Val Val Gly Cys Asn Pro Tyr Ser Ser Arg Lys Ala Ser
35 40 45

Trp Ile Ala Thr Gln Leu Glu Ala Gly Phe His Phe His Cys Ile Asp
50 55 60

Cys Asp Ile Thr Asp Trp Asp Ser Thr Arg Gln Ala Phe Asp Met Val
65 70 75 80

His Glu Thr Val Gly Pro Ile Asp Val Leu Val Asn Asn Ala Gly Ile
85 90 95

Thr Arg Asp Gly Thr Phe Arg Lys Met Ser Pro Glu Asn Trp Lys Ala
100 105 110

Val Ile Asp Thr Asn Leu Thr Gly Leu Phe Asn Thr Thr Lys Gln Val
115 120 125

Ile Glu Gly Met Leu Ala Lys Gly Trp Gly Arg Val Ile Asn Ile Ser
130 135 140

Ser Ile Asn Gly Gln Arg Gly Gln Phe Gly Gln Thr Asn Tyr Ser Ala
145 150 155 160

Xaa Lys Ala Gly Ile His Gly Phe Ser Met Ala Leu Ala Arg Glu Val
165 170 175

Please correct the above <213> response to just indicate the Genus species of the organism; place explanatory matter in the <220>-<223> section. Also, the above <213> response exceeds the Sequence Rules' required 72-character line limit. The "Xaa" at location 161 is not explained above.

<210> 17

<211> 392

<212> PRT

<213> Pseudomonas sp. HJ-2 (beta-ketothiolase (phbA))

<400> 17

Met Ile Glu Val Val Ile Val Ala Ala Thr Arg Thr Ala Ile Gly Ala
1 5 10 15

Phe Gln Gly Ser Leu Ala Gly Thr Pro Ala Val Glu Leu Gly Ala Thr
20 25 30

Val Ile Arg Arg Leu Leu Glu Gln Thr Ala Leu Asp Ser Ser Gln Val
35 40 45

Asp Glu Val Ile Leu Gly His Val Leu Thr Ala Gly Ala Gly Arg Ile
50 55 60

Pro Leu Ala Arg Xaa Xaa Val Ile Ala Gly Leu Pro His Ala Val Pro
65 70 75 80

Please correct the above <213> response. Also, the "Xaa's" at locations 69-70 are not explained above.

Application No: 10583840 Version No: 2.0

Input Set:

Output Set:

Started: 2009-07-22 14:17:12.979
Finished: 2009-07-22 14:17:15.807
Elapsed: 0 hr(s) 0 min(s) 2 sec(s) 828 ms
Total Warnings: 18
Total Errors: 6
No. of SeqIDs Defined: 18
Actual SeqID Count: 18

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (1)
W 213	Artificial or Unknown found in <213> in SEQ ID (2)
W 213	Artificial or Unknown found in <213> in SEQ ID (3)
W 213	Artificial or Unknown found in <213> in SEQ ID (4)
W 213	Artificial or Unknown found in <213> in SEQ ID (5)
W 213	Artificial or Unknown found in <213> in SEQ ID (6)
W 213	Artificial or Unknown found in <213> in SEQ ID (7)
W 213	Artificial or Unknown found in <213> in SEQ ID (8)
W 213	Artificial or Unknown found in <213> in SEQ ID (9)
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
W 402	Undefined organism found in <213> in SEQ ID (12)
W 402	Undefined organism found in <213> in SEQ ID (13)
W 402	Undefined organism found in <213> in SEQ ID (14)
W 402	Undefined organism found in <213> in SEQ ID (15)
E 342	'n' position not defined found at POS: 608 SEQID(15)
E 342	'n' position not defined found at POS: 1134 SEQID(15)
E 342	'n' position not defined found at POS: 1136 SEQID(15)
W 402	Undefined organism found in <213> in SEQ ID (16)
E 341	'Xaa' position not defined SEQID (16) POS (161)

Input Set:

Output Set:

Started: 2009-07-22 14:17:12.979
Finished: 2009-07-22 14:17:15.807
Elapsed: 0 hr(s) 0 min(s) 2 sec(s) 828 ms
Total Warnings: 18
Total Errors: 6
No. of SeqIDs Defined: 18
Actual SeqID Count: 18

Error code	Error Description
W 402	Undefined organism found in <213> in SEQ ID (17)
E 341	'Xaa' position not defined SEQID (17) POS (69)
E 341	'Xaa' position not defined SEQID (17) POS (70)
W 402	Undefined organism found in <213> in SEQ ID (18)

<110> LG CHEM, LTD.
<120> Poly(3-hydroxyalkanoate) Block Copolymer Having Shape Memory Effect

<130> LC05PCT042

<140> 10583840

<141> 2009-07-22

<150> KR 10-2005-0059907

<151> 2005-07-04

<160> 18

<170> KopatentIn 1.71

<210> 1

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Choi3 (PCR Primer)

<400> 1

ccggccstgsa tcaaggta

18

<210> 2

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Choi4 (PCR Primer)

<400> 2

gytsgtgsgy tcyycgttcc

20

<210> 3

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> HJ-PHB-N (PCR Primer)

<400> 3

caccatgctg agttgcgcctc tagc

24

<210> 4

<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> HJ-PHB-C (PCR Primer)

<400> 4
tcadmsytty acrtarcgkc ctggyc

27

<210> 5
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> SCL-1 (PCR Primer)

<400> 5
gatcgataacc aatctcacccg

20

<210> 6
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> SCL-2 (PCR Primer)

<400> 6
caaagccagt ggttcgacgt a

21

<210> 7
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> SCL-3 (PCR Primer)

<400> 7
ctgctgaaac tggggagg

19

<210> 8
<211> 47
<212> DNA
<213> Artificial Sequence

<220>

<223> SD-BA-N (PCR Primer)

<400> 8

gggggtacca ataaggagat atacatatgg gtactgcgag caatgcg

47

<210> 9

<211> 28

<212> DNA

<213> Artificial Sequence

<220>

<223> BA-C (PCR Primer)

<400> 9

cccactagtt cagcgctcga tggccagc

28

<210> 10

<211> 28

<212> DNA

<213> Artificial Sequence

<220>

<223> SD-phbC-N (PCR Primer)

<400> 10

gggcatatga cccagaagaa caacagcg

28

<210> 11

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> phbC-C (PCR Primer)

<400> 11

cccactagtt cadmscttya crtaaacgtcc tggcgcygc

39

<210> 12

<211> 756

<212> DNA

<213> Pseudomonas sp. HJ-2

<220>

<221> variation

<222> (482)

<223> n=A, C, G or T

<400> 12

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cactgcattcg actgcgacat caccgactgg gatagcaccc gccaggcctt cgacatggtg
cacgagactg tcggcccgat cgatgtattt gtcaacaatg ccggcatcac ccgcgacggc
actttccgca agatgtcccc ggaaaactgg aaggcggtga tcgataccaa tctcaccggc
ctgttcaaca caaccaagca ggtcatcgag ggcattgtgg ccaaggctg gggacgcgtc
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1800
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3000
3600
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4800
5400
6000
6600
7200
7500

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<210>      13
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<213> Pseudomonas sp. HJ-2

<220>
<221> variation
<222> (207)
<223> n=A, C, G or T

<220>
<221> variation
<222> (209)
<223> n=A, C, G or T

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accgcgtctgg atagcagtca ggtggatgaa gtgatactcg gccacgtact caccgcgggt   120
gctggcagaa taccgctcgc caggcancng gtcatcgccg gcctgccaca cgcgcgtaccg
gcgatgaccc tgaacaaggc ctgtggctcc ggcctgaaaag ccctgcaccc gggcgccccag   180
gcgcattccgt gtggcgatgc cgaggtggtg attgcccgtg gcatggagaa catgagccctg   240
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agegttactg	ccggcaacgc	ttccagtc	aacgacggcg	ccgcccgggt	actgctgatg	780
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ctggagaagg	cgggctggag	tctggcagag	ctggatctga	tcgaggccaa	tgaaggcttc	960
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agcctgctgc	atgaaatgct	caggcgcgac	gcgaaaaaaag	gcctcgctac	cctgtgtatc	1140
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<210> 14
 <211> 1701
 <212> DNA
 <213> Pseudomonas sp. HJ-2 (SCL-PHA synthase (phaC))

<400>	14					
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caaagccagt	gtttcgacgt	acctgtcgag	gcgttggagc	aactgcaggc	ggactaccaa	180
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cgtcgcttcg	ccagtggcaa	ctggagcgaa	ccgctgttcg	gttccctggc	tgccttctac	300
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ccccggccagc	gcttgcgtta	cttgatcgag	caagcgattg	ccgcaagcgc	cccaagtaac	420
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accctctgt	tccagctgat	ccagtatcg	ccgctcagcg	aaacgcaata	ccagcggccg	660
atattcatgg	tcccgccctg	gatcaacaag	tactacatcc	ttgacctcg	gccccaaaaac	720

tctctaatcc	gtcatctact	ggagcgaggc	catcaagttt	ttctgtatgtc	ctggcgcaac	780
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<210> 15
 <211> 3933
 <212> DNA
 <213> Pseudomonas sp. HJ-2 (phb locus)

<400> 15						
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caggagctc agcagcatc cggcagttgg tgggttgact ggttcgtctg gttgaccggc 3840
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3933

<210> 16
<211> 251
<212> PRT
<213> Pseudomonas sp. HJ-2 (NADPH-dependent acetoacetyl-CoA reductase (phbB))

<400> 16
Met Gly Thr Ala Ser Asn Ala Ala Arg Ile Ala Leu Val Thr Gly Gly
1 5 10 15

Met Gly Gly Ile Gly Thr Ala Ile Ser Gln Arg Leu His Arg Asp Gly
20 25 30

Phe Thr Val Val Val Gly Cys Asn Pro Tyr Ser Ser Arg Lys Ala Ser
35 40 45

Trp Ile Ala Thr Gln Leu Glu Ala Gly Phe His Cys Ile Asp
50 55 60

Cys Asp Ile Thr Asp Trp Asp Ser Thr Arg Gln Ala Phe Asp Met Val
65 70 75 80

His Glu Thr Val Gly Pro Ile Asp Val Leu Val Asn Asn Ala Gly Ile
85 90 95

Thr Arg Asp Gly Thr Phe Arg Lys Met Ser Pro Glu Asn Trp Lys Ala
100 105 110

Val Ile Asp Thr Asn Leu Thr Gly Leu Phe Asn Thr Thr Lys Gln Val
115 120 125

Ile Glu Gly Met Leu Ala Lys Gly Trp Gly Arg Val Ile Asn Ile Ser
130 135 140

Ser Ile Asn Gly Gln Arg Gly Gln Phe Gly Gln Thr Asn Tyr Ser Ala
145 150 155 160

Xaa Lys Ala Gly Ile His Gly Phe Ser Met Ala Leu Ala Arg Glu Val
165 170 175

Ser Gly Lys Gly Val Thr Val Asn Thr Val Ser Pro Gly Tyr Ile Lys
180 185 190

Thr Asp Met Thr Ala Ala Ile Arg Pro Asp Ile Leu Glu Asp Met Ile
195 200 205

Thr Gly Ile Pro Val Gly Arg Leu Gly Gln Pro Glu Glu Ile Ala Ser
210 215 220

Ile Val Ala Trp Leu Ala Ser Asp Gln Ser Ala Tyr Ala Thr Gly Ala
225 230 235 240

Asp Phe Ser Val Asn Gly Gly Met Asn Met Gln
245 250

<210> 17
<211> 392
<212> PRT
<213> Pseudomonas sp. HJ-2 (beta-ketothiolase (phbA))

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1 5 10 15

Phe Gln Gly Ser Leu Ala Gly Thr Pro Ala Val Glu Leu Gly Ala Thr
20 25 30

Val Ile Arg Arg Leu Leu Glu Gln Thr Ala Leu Asp Ser Ser Gln Val
35 40 45

Asp Glu Val Ile Leu Gly His Val Leu Thr Ala Gly Ala Gly Arg Ile
50 55 60

Pro Leu Ala Arg Xaa Xaa Val Ile Ala Gly Leu Pro His Ala Val Pro
65 70 75 80

Ala Met Thr Leu Asn Lys Val Cys Gly Ser Gly Leu Lys Ala Leu His
85 90 95

Leu Gly Ala Gln Ala Ile Arg Cys Gly Asp Ala Glu Val Val Ile Ala
100 105 110

Gly Gly Met Glu Asn Met Ser Leu Ser Ser Tyr Val Leu Pro Lys Ala
115 120 125

Arg Thr Gly Leu Arg Met Gly His Ala Gln Leu Val Asp Ser Met Ile
130 135 140

Val Asp Gly Leu Trp Asp Ala Phe Asn Asp Tyr His Met Gly Ile Thr
145 150 155 160

Ala Glu Asn Leu Val Asp Lys Tyr Gly Ile Ser Arg Glu Ala Gln Asp
165 170 175

Glu Phe Ala Ala Ala Ser Gln Gln Lys Ala Val Ala Ala Ile Glu Thr
180 185 190

Gly Arg Phe Arg Asp Glu Ile Val Pro Val Ser Ile Pro Gln Arg Lys
195 200 205

Gly Glu Ala Leu Ser Phe Asp Thr Asp Glu Gln Pro Arg Ala Gly Thr
210 215 220

Thr Ala Glu Ser Leu Gly Lys Leu Lys Pro Ala Phe Lys Asn Asp Gly
225 230 235 240

Ser Val Thr Ala Gly Asn Ala Ser Ser Leu Asn Asp Gly Ala Ala Ala
245 250 255

Val Leu Leu Met Ser Ala Ala Lys Ala Ala Leu Gly Leu Pro Val